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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 80089(302721)
Application Number 10/591,865-Conf. #3441	Filed September 6, 2006	
First Named Inventor Naoto Ikegawa et al.		
Art Unit 1796	Examiner M. M. Dollinger	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 60%;"> <input type="checkbox"/> applicant /inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>51,615</u> <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. _____ </div> <div style="width: 35%; text-align: center;"> <u>/Nicholas J. DiCeglie, Jr./</u> Signature <u>Nicholas J. DiCeglie, Jr.</u> Typed or printed name <u>(212) 308-4411</u> Telephone number <u>September 1, 2010</u> Date </div> </div> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <input type="checkbox"/> *Total of <u>1</u> forms are submitted. </div>		

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: September 1, 2010

Electronic Signature for Nicholas J. DiCeglie, Jr.: /Nicholas J. DiCeglie, Jr./

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: September 1, 2010
Electronic Signature for Nicholas J. DiCeglie, Jr.: /Nicholas J. DiCeglie, Jr./

Docket No.: 80089(302721)
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Naoto Ikegawa et al.

Application No.: 10/591,865

Confirmation No.: 3441

Filed: September 6, 2006

Art Unit: 1796

For: RESIN MODEL ARTICLE WITH REDUCED
DIELECTRIC LOSS TANGENT AND
PRODUCTION METHOD THEREFOR

Examiner: M. M. Dollinger

**REMARKS/ARGUMENTS IN SUPPORT OF
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

INTRODUCTORY COMMENTS

Applicants are in receipt of the final Office Action dated June 1, 2010 (the "Office Action"), and now request review of the Office Action. A Notice of Appeal is respectfully filed herewith. The following remarks support Applicants' "Pre-Appeal Brief Request for Review" also filed herewith. These remarks do not exceed five pages, do not present amendments, and are being filed with a Notice of Appeal, thereby satisfying the requirements for review.

The Office Action

In the Office Action, Claims 1, 2, 5-8 and 10-19 have been rejected. Specifically, Claims 1, 2, 5, 6, 8 and 13 are rejected under 35 U.S.C. 103(a) as obvious over United States Patent No. 5,891,532 to Furuta et al. (the '532 Patent) in view of United States Patent No. 5,728,354 to Domergue et al. ("the '354 patent"); Claims 1,2, 5-8 and 10-13 are rejected under 35 U.S.C. 103(a) as obvious over United States Patent No. 5,759,674 to Furuta et al. (the '674 Patent) in

view of the '354 patent; and Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as obvious over the '532 Patent in view of the '354 Patent and further in view of the '674 Patent. Furthermore, Claims 14-19 are rejected under 35 U.S.C. 103(a) as obvious over the '674 Patent in view of the '354 Patent and in further view of Patent No. 6,838,546 to Okamoto ("Okamoto"); and Claims 14-19 are also rejected under 35 U.S.C. 103(a) as obvious over the '532 Patent in view of the '354 Patent and in further view of Okamoto.

The Office Action alleges that the '532 Patent teaches molded films of a liquid crystal polyester resin composition having the same composition as the claimed materials and which is molded at a temperature between $\pm 60^{\circ}\text{C}$ of the flow-beginning temperature (Column 12, lines 11-14) and that one of ordinary skill in the art would infer that the dielectric loss tangent would be an *inherent* feature of the material. The Office Action also alleges that the '674 Patent teaches laminates of a liquid crystal polyester resin composition laminated on a metal foil having the same composition of the claimed materials and that the lamination step reads on the heat treatment of the claimed invention. Specifically, the Office Action notes Example 5 which reads on a polyester having a flow temperature of 324°C which is laminated at 290°C . The Office Action further contends that the '354 Patent discloses a process for producing a nitrogen atmosphere for heat treatment processes which is produced at "extremely favorable cost" and is "better for heat treatments than atmospheres with residual oxygen." As such, the Office Action alleges that it would have been obvious to one of ordinary skill in the art to prepare the resin molded articles of the '532 Patent or the '674 Patent with the nitrogen atmosphere of the '354 Patent because the '354 Patent teaches that the atmospheres are better than heat treatment in atmospheres that contain residual oxygen.

The Office Action further alleges that the '674 Patent and the '532 Patent disclose printed circuit boards comprising a resin composition layer including an inorganic filler but they each fail to disclose the amount of inorganic filler included in the composition. The Office Action alleges that Okamoto discloses an aromatic liquid crystalline composition useful as a printed circuit board which includes a dielectric material (barium titanate or strontium titanate) in an amount of 0.2 to 200 parts by weight based on 100 parts by weight of the aromatic liquid crystal polyester and solvent. The Office Action argues that it would have been obvious to one

of skill in the art to utilize the amounts and fillers of Okamoto in circuit boards with the materials of the '674 Patent and the '532 Patent.

Finally, Claims 1, 5, 7, 8 and 10-19 are provisionally rejected on the grounds of nonstatutory obviousness-type double patenting over Claim 13 of copending Application No. 10/591,706 (the '706 Application).

Clear Error and/or Omission in the Final Office Action:

Neither the '532 Patent nor the '674 Patent render the present claims obvious alone, or in combination with each other or the '354 patent

The pending claims recite that the heat treatment is performed in an inert-gas atmosphere under a condition that the residual oxygen concentration is less than 1%. Neither the '532 Patent nor the '674 Patent teach or suggest performing the purported heat treatment under such conditions. Indeed, the only mention of an inert atmosphere in each case is in the context of a melt-extrusion which would, by definition, be at a temperature higher than the claimed range.

Thus, one of ordinary skill in the art would recognize that the oxygen content of the subsequent materials would likely be significantly higher than the claimed materials which are heat treated in an inert-gas atmosphere. One of ordinary skill in the art would also recognize that the presence of a higher oxygen content would likely dramatically alter the dielectric loss tangent and the peel strength of the resin composition. Applicants contend that these properties of the final product are highly dependent on whether thermal treatment on the resin composition is conducted inside a cylinder of a molding machine during molding, or conducted under a specific condition (other than molding condition) such as inert-gas atmosphere as stated the instant claims after molding.

While the '354 Patent does disclose that "the huge majority of the heat treatments in industrial practice" are incompatible with the presence of free oxygen, *the '354 patent acknowledges that there are applications which are compatible with the presence of oxygen.* Applicants respectfully assert that, as neither of the '532 nor the '674 Patent teach or suggest performing the purported heat treatment under inert conditions, one of ordinary skill in the art would logically read the '532 nor the '674 Patents as being compatible with the presence of

oxygen. As such, one of ordinary skill in the art would have had no reason to modify the atmosphere of the purported heat treatment to utilize the atmosphere of the '354 Patent.

Neither the '532 Patent nor the '674 Patent render the present claims obvious alone, or in combination with the '354 patent and/or Okamoto

As described above, the instant claims recite that the heat treatment is performed in an inert-gas atmosphere under a condition that the residual oxygen concentration is less than 1% and one of ordinary skill in the art would have no expectation of success at arriving at the claimed materials from either the materials of the '532 Patent or the '674 alone or in combination.

Okamoto does nothing to rectify the deficiencies of the '532 Patent and the '674 Patent to teach or suggest the claimed compositions. As such, even if one of ordinary skill in the art were to utilize the amount of filler purportedly described by the rejection, there would still have been no reasonable expectation of success in achieving the results of the instant invention based on the teachings of the '532 Patent or the '674 Patent alone or in combination with Okamoto.

The Provisional Double Patenting Rejection Should Be Withdrawn According to M.P.E.P. §804

As the '706 application has not yet issued as a patent, the double patenting rejection is a "provisional" rejection as stated above. According to M.P.E.P. §804 (I)[B](1) if "provisional" ODP rejections in two applications are the only rejections remaining in those applications, *the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer*" (emphasis added). Applicants believe that after consideration of the arguments made herein, no other rejection will remain in the present application and, thus, the ODP rejection should be withdrawn and the application advanced to issuance.

CONCLUSION

Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 1, 2, 5-8 and 10-19.

For at least the foregoing reason, Applicants contend that the rejections of record should be withdrawn, and that the present application is in condition for allowance. Early and favorable consideration of the application is earnestly solicited.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 80089(302721).

Dated: September 1, 2010

Respectfully submitted,

Signature: /Nicholas J. DiCeglie, Jr./

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